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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

REESE, DAVID C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,571

Applicant(s)

GAUTHIER, ALAIN

Examiner

David C. Reese

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

THIS FINAL ACTION IS RESPONSIVE TO THE AMENDMENT FILED 4/24/2006.

- Claims 22-23 were added.
- Claims 1, 8, 10-11, 13, 17, and 21 were amended.
- Claims 1-23 are pending.

Claim Objections

[1] Claim(s) 1, 8-9, 13, 17, 19, and 21 were previously objected to because of informalities.

Applicant has successfully addressed these issues in the amendment filed on 4/24/2006.

Accordingly, the objection(s) to the claim(s) 1, 8-9, 13, 17, 19, and 21 have been withdrawn.

Claim Rejections - 35 USC § 103

[2] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[3] Claims 1, 3-4, 6, 8-14, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. US-6,354,779, in view of Mulroy et al., US-6,113,321.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

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As for Claim 1, West et al. teaches of a anchor for friable material, said anchor comprising

a roughly cylindrical body (222 in Fig. 7B)

a drilling portion (below 204 in Fig. 7B) provided at a first free end of the body with drilling teeth (three teeth below 204 in Fig. 7B);

a bearing flange (212 in Fig. 7B) at a second end of the body; and

an external screw thread (threads between 222 in Fig. 7B) extending around the body (222 in Fig. 7B) in a first direction;

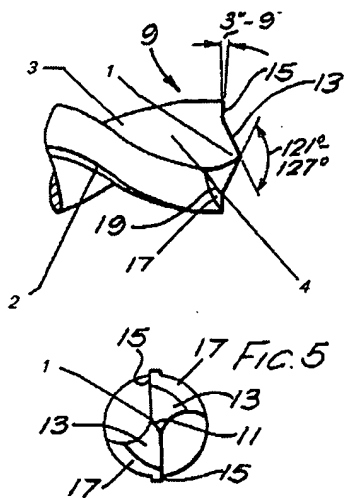
the drilling portion (below 204 in Fig. 7B) being configured as a portion of a drill bit, wherein the drill bit portion (below 204 in Fig. 7B) has two helical flutes (204 on the right, and the other on the upper left in Fig. 7B) which extend in first direction (between 222 in Fig. 7B), each of said flutes opening onto a single flat surface (below 204 on the right, and the other on the left in Fig. 7B) forming a wall.

The difference between the claim and West et al. is the claim recites: that the flat surface of the flute forms walls of both a central drilling tooth and one of two lateral drilling teeth.

Mulroy et al. discloses a drilling portion similar to that of West et al. In addition, Mulroy et al. further teaches of each of flutes (3 in the Figure below) opening onto a flat surface (4) forming the walls of both a central drilling tooth (1) and one of two lateral drilling teeth (15). It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. and Mulroy et al. before him at the time the invention was made, to modify the drilling portion of West et al. to have the flat surface of the flute opening form the walls of both a central drilling tooth and one of two lateral drilling teeth as in Mulroy et al. One would have been motivated to

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make such a combination because such a configuration of the drilling portion allows a more concrete engagement of a work piece and thereby allowing a more efficient drilling event.



Re: Claim 3, West et al. teaches of a body that is hollow and pierced with a bore (114 in Fig. 3).

Re: Claim 4, Mulroy et al. discloses wherein said drilling portion further comprises two drill bit ribs (2) bordering said flutes (3), each of said ribs (2) forming one of said lateral drilling teeth (15).

Re: Claim 6, West et al. teaches of a body that is hollow and pierced with a bore (114 in Fig. 3).

As for Claim 8, West et al. teaches of an anchor for friable material, said anchor comprising

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a shank (203);
a head (212) formed at an upper end of said shank;
a drilling portion (204) formed at a lower end of said shank; and
a plurality of external threads (threads between 222 in Fig. 7B) which helically extend in a first direction about said shank between said head (212) and said drilling portion (204);
wherein said drilling portion (204) comprises
two helical flutes (204 on the right, and the other on the upper left in Fig. 7B) extending in the first direction.

The difference between the claim and West et al. is the claim recites: of a central drilling tooth having opposing flat surfaces; and each of said flutes ending at one of said flat surfaces of said central drilling tooth and that said drilling portion further comprises two lateral drilling teeth on opposite sides of said central drilling tooth, each of said lateral drilling teeth having a flat surface which is coplanar with one of the flat surfaces of said central drilling tooth.

Mulroy et al. discloses a drilling portion similar to that of West et al. In addition, Mulroy et al. further teaches of each of said flutes (3 in Figure above) opening onto a flat surface (4) forming the wall of a central drilling tooth (1) and of one of two lateral drilling teeth (15). Further, Mulroy et al. discloses wherein said drilling portion further comprises two lateral drilling teeth (15) on opposite sides of said central drilling tooth (1), each of said lateral drilling teeth (15) having a flat surface being coplanar with one of the flat surfaces of said central drilling tooth (1).

It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. and Mulroy et al. before him at the time the invention was made, to modify the

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drilling portion of West et al. to have the flat surface of the flute opening form the wall of a central drilling tooth as in Mulroy et al. One would have been motivated to make such a combination because such a configuration of the drilling portion allows a more concrete engagement of a work piece and thereby allowing a more efficient drilling event.

Re: Claim 9, Mulroy et al. discloses wherein said drilling portion further comprises two drill bit ribs (2) bordering said flutes (3), each of said ribs (2) forming one of said lateral drilling teeth (15).

Re: Claim 10, Mulroy et al. further teaches of a flat surface of the central drilling tooth (1) extends laterally to define the flat surface of a first of said lateral drilling teeth (15), and the rib (2) that forms a second of said lateral drilling teeth (15) defines a raised border of said central drilling tooth (11) on said flat surface.

Re: Claim 11, Mulroy et al. further teaches wherein each of said flat surfaces of the central drilling tooth (1) extends laterally to define a flat surface of only one of said lateral drilling teeth (15).

Re: Claim 12, Mulroy et al. further teaches wherein each of said flat surfaces of the central drilling tooth (1) extends downwardly to an pointed end of said central drilling tooth (1) which pointed end is a lowermost point of said anchor.

Re: Claim 13, Mulroy et al. further teaches wherein each of said flutes (3) ends abruptly at a respective flat surface of the central drilling tooth (1).

Re: Claim 14, Mulroy et al. teaches wherein said flat surfaces of the central drilling tooth (1) define four cutting edges.

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Re: Claim 16, West et al. teaches of a shank that is hollow and pierced with a bore (114 in Fig. 3).

As for Claim 17, West et al. teaches of a anchor for friable material, said anchor comprising

- a shank (203);
- a head (212) formed at an upper end of said shank;
- a drilling portion (204) formed at a lower end of said shank; and
- a plurality of external threads (threads between 222 in Fig. 7B) which helically extend in a first direction about said shank between said head (212) and said drilling portion (204);

wherein said drilling portion (204) comprises

- two helical flutes (204 on the right, and the other on the upper left in Fig. 7B) helically extending in first direction.

The difference between the claim and West et al. is the claim recites: of a central drilling tooth having opposing flat surfaces; and each of said flutes ending at one of said flat surfaces of said central drilling tooth and that said drilling portion further comprises two lateral drilling teeth on opposite sides of said central drilling tooth, each of said lateral drilling teeth having a flat surface which is a continuous extension of one of the flat surfaces of said central drilling tooth, and which extends seamlessly without interruption into said one of the flat surfaces of said central drilling tooth.

Mulroy et al. discloses a drilling portion similar to that of West et al. In addition, Mulroy et al. further teaches of each of said flutes (3 in figure above) opening onto a flat surface (4) forming the wall of a central drilling tooth (1) and of one of two lateral drilling teeth (15).

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Further, Mulroy et al. discloses wherein said drilling portion further comprises two lateral drilling teeth (15) on opposite sides of said central drilling tooth (1), each of said lateral drilling teeth (15) having a flat surface which is a continuous extension of one of the flat surfaces of said central drilling tooth (1), and which extends seamlessly without interruption into said one of the flat surfaces of said central drilling tooth (1).

It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. and Mulroy et al. before him at the time the invention was made, to modify the drilling portion of West et al. to have the flat surface of the flute opening form the wall of a central drilling tooth as in Mulroy et al. One would have been motivated to make such a combination because such a configuration of the drilling portion allows a more concrete engagement of a work piece and thereby allowing a more efficient drilling event.

Re: Claim 18, Mulroy et al. discloses wherein each of said flat surfaces of the central drilling tooth (1) extends downwardly to an pointed end of said central drilling tooth (1) which pointed end is a lowermost point of said anchor.

Re: Claim 19, Mulroy et al. discloses wherein each of said flutes (3) ends abruptly at a respective flat surface of the central drilling tooth (1).

Re: Claim 20, Mulroy et al. discloses wherein said flat surfaces of the central drilling tooth (1) define four cutting edges.

Re: Claim 21, Mulroy et al. discloses wherein an angle between said walls is zero (the angle between 1 and 15 in the second figure, figure 5, above).

Re: Claim 22, wherein the four cutting edges (1) are essentially straight edges.

Re: Claim 23, wherein the four cutting edges (1) are essentially straight edges.

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[4] Claims 2, 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. US-6,354,779, in view of Mulroy et al., US-6,113,321, and further in view of Carlson et al, US-4,157,674.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claims 2, 5, and 15, West et al. in view of Hinch teaches of claims 1, 3-4, 6-9, and 17-19

The difference between the claims and West et al. in view of Mulroy et al. is the claim recites: that the self-drilling anchor possesses a threaded shank portion that extends beyond its flange. Carlson et al. discloses a threaded fastener similar to that of West et al. in view of Mulroy et al.. In addition, Carlson et al. further teaches of a threaded shank, a flange, and a threaded shank portion that extends beyond its flange. It would have been obvious to one of ordinary skill in the art, having the disclosures of West et al. in view of Mulroy et al. and Carlson et al. before him at the time the invention was made, to modify the flange of West et al. in view of Mulroy et al. to include a threaded shank portion beyond its flange, as in Carlson et al. One would have been motivated to make such a combination because it allows “a second thread adapted to threadingly engage a nut or other threaded member...” as taught by Carlson et al, in part 1, line 17.

Response to Arguments

[5] Applicant's arguments filed 4/24/2006 regarding rejections under 35 U.S.C. 103 have been fully considered but they are not persuasive. To begin, the applicant refutes the aspect of bodily incorporation and the lack of suggestion to combine a central cutting element. In response, first it has been held that the test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in the pertinent art. *In re Bozek*, 163 USPQ 545 (CCPA 1969).

Secondly, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. In this case, one of ordinary skill in the art would readily appreciate the combination of disclosures as a whole and that the aspect of altering the drilling portion of an anchor is obvious in view of numerous drill bits; since the structure of drill bits allows for their utility in providing diverse drilling characteristics.

With regard to the examiner adding numerals to the figures of Mulroy et al. to indicate the surfaces that are being claimed, it is pertinent to point out that claims in a pending application

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should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974), and that things clearly shown in reference patent drawings qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

The examiner suggests in the instant case that the applicant focus more on claiming the exact flat surface area that the central and lateral drilling tooth do indeed possess. For example, is there a abrupt change in the dimensions of the surface area from the helical flute to the flat surface; as well as the fact that the flat surface extends past the central axis of the anchor in both directions, with it continuing all the way to the far lateral side on one side of said central axis.

Conclusion

[6] **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

[7] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCR

David Reese
Assistant Examiner
Art Unit 3677


6/27/06

ROBERT J. SANEY
PRIMARY EXAMINER